

BEFORE THE
POSTAL REGULATORY COMMISSION
WASHINGTON, D.C. 20268-0001

PERIODIC REPORTING
(PROPOSAL THIRTEEN)

Docket No. RM2015-7

**RESPONSE OF THE UNITED STATES POSTAL SERVICE
TO COMMISSION ORDER NO. 2792**
(February 16, 2016)

On October 29, 2015, the Commission issued Order No. 2792 in this proceeding. Among other things, that Order directed the Postal Service to file a report addressing certain matters by February 15, 2016. The requested report is provided below and, because of yesterday's Federal holiday, is submitted today.

I. Introduction

In Order No. 2792, the Commission approved the updated city carrier letter route street time model submitted as Proposal Thirteen, and recognized that the new model improved "the quality, accuracy, and completeness of city carrier street time cost attribution."¹ As part of the Order, the Commission also directed the Postal Service to file a report addressing three specific issues that relate to estimation of city carrier attribution models. The first issue encompasses exploring the steps required to capture accurate daily letter route volumes of collection mail, in-receptacle parcels, deviation parcels, and accountable mail. The Postal Service is to investigate collecting these data to see if the data would be sufficient to estimate a single equation model of street time variability. If so, the Postal Service is to determine if a single model produces improved estimates of variability.

¹ See Docket No. RM2015-7, Order No. 2792, at 64 (October 29, 2015).

The second issue involves addressing the status of updating the city carrier parcel route cost models, and the third issue covers reporting on the treatment of Sunday delivery hours.² Accordingly, this report has three more sections. Section II discusses the background, potential data sources, initial cost estimates, and preliminary timelines for recording accurate daily volumes for collection mail, in-receptacle parcels, deviation parcels, and accountable mail. Section III provides a status report on the efforts of the Postal Service with regard to updating the established parcel cost model. Section IV discusses the current treatment of Sunday delivery hours.

II. Collecting the Data to Estimate a Single Equation Letter Route Cost Model

A. Background

The previous city carrier letter route street time cost model was based on data collected during the City Carrier Street Time Study (CCSTS) conducted in 2002 and litigated in Docket No. R2005-1 and Docket No. R2006-1. The CCSTS was an expensive and time-consuming field study that captured time and volume information from all letter routes in a sample of over 160 ZIP Codes. The times associated with all street activities were captured by carriers self-scanning a set of specifically-designed barcodes. The corresponding delivered volumes were captured by machine counts, linear measurements, and manual counts, all carefully verified by supervisors.

B. Docket No. RM2011-3

As part of Docket No. RM2011-3, Priorities for Future Data Collection and Analytical Work Related to Periodic Reporting, the Commission identified an update to

² *Id.* at 65-66.

the city carrier street time costing approach as one of several candidates for improvements in data collection and analysis.³

This decision was based on continuing questions about data quality, the importance of the size of street time costs in both absolute and relative terms, the length of time since data had been collected, and numerous developments affecting street delivery. Later, the Commission elevated street time costing to the highest near-term research priority.⁴

Concerns over the quality of data collected in large field studies and resource constraints caused the Postal Service to investigate the use of operational data in its update of the city carrier street time cost model. The Postal Service thoroughly investigated the utility of several operational datasets (Form 3999, Delivery Operations Information System (DOIS), Carrier Optimal-Routing (COR) System, and Managed Service Points (MSP)) and reported its findings as part of Docket No. RM2011-3.⁵ This examination led to the conclusion that an updated city carrier street time cost model could use two operational datasets 1) Form 3999 and 2) DOIS. The Form 3999 dataset is a nearly comprehensive list of route evaluations of city letter routes. This dataset can be used to disaggregate city carrier street time into the various activities that are needed to estimate street time cost pools.⁶ DOIS data provide street hours and delivered volumes by ZIP Code on a daily basis. Utilizing these two operational datasets sharply reduced the administrative and carrier labor costs of performing an update and made it feasible in a resource-challenged environment.

³ *Id.* Appendix C at 3.

⁴ *Id.* Appendix C at 3-4.

⁵ See Docket No. RM2011-3, Scoping Study Report of the United States Postal Service at 8-41, May 25, 2012.

⁶ *Id.* at 33.

However, investigation by the Postal Service determined that the available operational datasets had specific deficiencies for measurements of volume and time, and some data would have to be captured through special field studies. With respect to volume, the operational datasets were deficient in accurate measurements of 1) collection mail from customers, 2) in-receptacle parcels, 3) deviation parcels, and 4) accountable mail. For street time, the operational datasets did not have accurate measures of the times required to deliver in-receptacle parcels, deviation parcels, and accountable mail. As a result of these deficiencies, the Postal Service conducted two field studies, with the same randomly selected 300 ZIP Codes, each for two delivery weeks. The first, to obtain collection volumes, occurred during spring 2013 and was called the City Carrier Collection Mail Volume and Source Study (CCCMVSS). The second, to collect parcel and accountable volumes and delivery times, occurred in spring 2014 and was called the City Carrier Package and Accountable Study (CCPAS). Together, these studies gathered the deficient data elements required to update the city carrier street time letter route cost model.^{7 8}

C. Docket No. RM2015-7

The Postal Service initiated a proceeding to consider a proposed change in analytical principles used for the city carrier letter route street time model in December 2014.⁹ The new model primarily used the Form 3999 database supplemented with measured time data from the CCPAS to form the required cost pools. The updated

⁷ See Docket No. RM2011-3, Library Reference PRC-RM2011-3-LR1, Technical Conference Slides, August 13, 2013.

⁸ USPS-RM2015-7/1, City Carrier Street Time Study Report at 27 and at 91.

⁹ See Docket No. RM2015-7, Proposal Thirteen, Petition of the United States Postal Service for the Initiation of a Proceeding to Consider Proposed Change in Analytical Principles, December 11, 2014.

model also included three econometric equations to estimate a new set of variabilities. One equation estimated variabilities for regular delivery time. The dependent variable, regular delivery time, was constructed from data from DOIS and the Form 3999 database. The right-hand-side variables consisted of volume measures from DOIS, supplemented with collection mail data measured in the CCCMVSS as well as several characteristic variables. The final analysis dataset for the regular delivery equations had data for 3,513 ZIP Code days.¹⁰ The other two econometric equations were estimated to produce variabilities for in-receptacle parcels, deviation parcels, and accountable mail. These equations used the measured times and volumes from CCPAS. The analysis dataset used for these two econometric equations had data for 3,300 ZIP Code days.¹¹

Although the Commission approved the use of these equations, as mentioned above, it indicated a desire for further investigation into the feasibility of a “top-down” variability equation. Such an equation would include parcels and accountable mail with letters and flats in a single street time equation. The Commission directed the Postal Service to thoroughly investigate its operational data systems to see if it would be possible to capture accurate daily parcel, accountable mail, and collection mail volume measures to replace the data elements collected in the two field studies.

In the Commission’s review of alleged omitted variable bias, the Commission indicated that the presence of multicollinearity may explain why in-receptacle parcels did not pass a test of joint significance when both in-receptacle and deviation parcels

¹⁰ USPS-RM2015-7/1, City Carrier Street Time Study Report at 36.

¹¹ *Id.* at 101.

are included in the same equation.¹² The Commission also remarked that a widely accepted method for reducing multicollinearity is to use a larger data set.¹³

In sum, if the Postal Service were able to accurately record daily volumes of collection mail, in-receptacle parcels, deviation parcels, and accountable mail across its entire letter route network, the issues of imputation would be solved and, possibly, multicollinearity would be reduced. If these two problems could be solved, then the likelihood of estimating successfully using a “top-down” single equation approach to street time variability would be increased.

A single equation approach relies on accurate daily volumes for collection mail, in-receptacle parcels, deviation parcels, and accountable mail. The next subsection of this report will discuss the Postal Service’s efforts to evaluate possible operational data sources to obtain accurate daily counts of these four variables. The report will then discuss estimates of the costs required to obtain those daily counts.

D. Potential Operational Data Sources

1. In-Receptacle and Deviation Parcels

A possible source of daily package and accountable volumes is the Product Tracking and Reporting (PTR) system. PTR is a database that stores tracking scan data for packages and extra services products bearing barcodes compatible with the tracking system. The scan events take place from acceptance to delivery. The tracking information comes from business mailers’ files, handheld scanners, retail equipment, mail processing equipment, and other Postal Service data systems. Queries can be

¹² Multicollinearity in econometric equations arises when the right-hand-side variables are highly correlated with one another. Multicollinearity makes it difficult to identify the separate effects of individual variables in the model.

¹³ See Docket No. RM2015-7, Order No. 2792, Appendix B at 4 (October 29, 2015).

performed on PTR so that delivery scans can be isolated by ZIP Code, route number, and scanner ID.

Because city carriers scan nearly all of the packages and accountable mail they deliver, PTR is a potential source of daily and accountable volume data for city carrier letter routes. However, until recently, there was no way to use this operational data to measure separately the volume of in-receptacle and deviation parcels. A possible solution to this deficiency arises from the deployment of new scanners called the Mobile Delivery Devices (MDDs). MDDs were fully deployed on the city delivery network in October 2015.

MDDs are used to scan packages when they are received at Post Offices and when they are delivered to customers. This up-to-the-minute information is fed to the My.USPS.com application, allowing customers to track individual packages as they move through the postal network. The new devices offer real-time scanning and GPS data, so carriers no longer need to carry both scanners and cell phones. The on-screen signature capability frees carriers from the task of filling out paper delivery receipts, improving efficiency.

The use of MDDs, in conjunction with PTR, may also provide the capability to accurately enumerate separate counts of in-receptacle and deviation parcels. MDDs enable the carrier to indicate the delivered location (e.g., in/at mailbox, front door porch, parcel locker) for the packages and accountable items they scan at delivery. This information feeds into PTR. Thus, for parcels with delivery barcodes, separate counts of in-receptacle parcels and deviation parcels could be made utilizing this additional functionality of the MDDs. Accurate counts of in-receptacle and deviation parcels,

however, are dependent on the carrier correctly recording the delivery location of each parcel delivered. Because the MDDs have only been fully deployed for a few months, the Postal Service has just started its thorough investigation into the accuracy of parcel counts by delivery location, hence in-receptacle and deviation.

To gain a sense of the accuracy of the PTR designation, the Postal Service plans to compare the relative shares of in-receptacle and deviation parcels from PTR with the relative shares from the City Carrier Cost System (CCCS), which currently records in-receptacle and deviation parcels on each city carrier test. One important caveat to this proposed approach is that it cannot count parcels without delivery barcodes. Currently, it is believed that five to seven percent of delivered parcels do not have tracking barcodes, and this approach would not count those parcels. However, the proportion of parcels without tracking barcodes should decrease with time.

In Order No. 2972, the Commission proposed a possible alternative method for obtaining separate counts of in-receptacle and deviation parcels. The Commission suggested it may be possible to use machine-generated data from the sorting of parcels at the 5 digit level, supplemented with information from mailing statements, to count parcels entered at the Destination Delivery Unit (DDU).¹⁴

The Postal Service appreciates the suggestion made by the Commission and carefully investigated this approach. It found that the approach has two potentially serious deficiencies. First, this approach does not capture parcels that are manually sorted to the 5 digit level and thus are not included with machine counts. Not only would this provide a parcel undercount, but it also would affect the split between in-receptacle and deviation parcels. Non-machinable parcels have a tendency to be larger

¹⁴ *Id. at 65-66*

and more awkward than machinable parcels, so not including them would likely distort the relative shares of in-receptacle parcels and deviation parcels delivered. Second, and more importantly, the proposed method does not produce separate counts of in-receptacle and deviation parcels, which are vital cost drivers to parcel costs. Because of these concerns, the Postal Service is currently focusing its investigation on using PTR in conjunction with the delivered location functionality that exists with the MDDs.

2. Accountable Mail

The Commission suggested that the use of the MDDs could provide accurate measures of delivered accountable mail volume.¹⁵ Although it has just begun its investigation into this issue, the Postal Service agrees that this method has the potential to produce accurate daily counts of accountable mail by ZIP Code. Accountable mail is mail that requires customer contact (e.g., Certified, Registered) and each tracking barcode for these pieces contains a Service Type Code (STC). Accountable mail can be identified in PTR by its STC. Thus, it should be possible to obtain an accurate daily count of delivered accountable mail through PTR. However, the Postal Service has only just initiated its investigation into this method, so unexpected difficulties may arise from this seemingly straightforward approach.

3. Mail Collected From Customer Receptacles

Mail collected by city carriers from customer receptacles, as opposed to street letter boxes, is not currently recorded by any of the Postal Service's operational systems. The regular delivery equation uses collection mail from customers by ZIP Code as an input. The Commission recognized that recording collection mail may be

¹⁵*Id. at 66.*

difficult to automate, but suggested manual estimates based on a length or weight conversion factor could be used.¹⁶

Confusion may arise from the term “automate” data collection as used in this context. Typically, collection mail from customers is gathered by letter route carriers in discrete amounts across numerous delivery points. When the carriers return to the office, they deposit their collection mail into hampers. The collection mail is then transported to a mail processing facility, where it is pooled with collection mail from many other offices and processed on automation equipment. Because of the pooling prior to the point the collection mail is processed by machine, it is not possible to use machine counts to determine collection mail volume by originating ZIP Code. Thus, for the purposes of this discussion, which relates to obtaining daily collection mail volumes by originating ZIP Code, the Postal Service interprets the term “automated” data collection to mean that daily collection mail volumes could be retrieved from an ongoing operational system that was based upon manual linear measurements and piece counts, as opposed to being counted by automated equipment. If collection mail volumes could be retrieved from an ongoing system, this would eliminate the need to embark on a special field study to obtain the information, as was done with CCCMVSS. The Postal Service agrees that accurate counts of collection mail will be difficult to automate. Moreover, the Postal Service believes that it also may be cost prohibitive to do so.

If recording of collection mail were to be done on a daily basis, it would be appropriate for carriers to record collected letters and flats in terms of linear measurements as they did in the CCCSMVS, rather than conduct piece counts.

¹⁶ *Id.* at 66.

Collected parcels, however, would be entered with piece counts. This is likely to create a substantial additional burden if the collection volume were collected on an ongoing basis.

E. Costs

The proposed approach to recording daily counts of in-receptacle and deviation parcels and accountable mail is to extract existing data from PTR and use the additional functionality of the MDDs where required to identify the necessary detail. However, even if successful, this data extraction effort still will be extremely costly, due to the large amounts of data that would have to be obtained, stored, and analyzed. The average volumes from CCPAS can be used to determine a rough approximation as to the magnitude of the data that would need to be extracted using this approach.

The CCPAS suggested that 44 parcels and accountable mail pieces are delivered daily on the “average” city carrier letter route.¹⁷ Each delivered piece with a tracking barcode is scanned by a carrier using a MDD and generates a row of data using PTR. Multiplying the 44 pieces a day by roughly 140 thousand city letter routes results in 6.2 million data records *daily* that need to be extracted, stored, and eventually analyzed for accuracy. Clearly, this will require significant resources. In our initial investigations, the download rate from PTR has been approximately two million records per hour. Thus, it takes roughly three hours to obtain a comprehensive dataset for one day, without considering the time to analyze the data for completeness and accuracy. Such analysis would be essential, but also very time-consuming.

While it is likely that efficiencies will arise that will increase the data download rate, the Postal Service believes its investigation into utilizing this approach will present

¹⁷ USPS-RM2015-7/1, City Carrier Street Time Study Report at 98.

numerous challenges due to the size and recent vintage of the data. One, this dataset is many times larger than any previous one used for delivery costs in the regulatory environment, which likely will result in potential issues in validating the completeness and accuracy of the data. Two, as was discussed earlier, this method for counting in-receptacle and deviation parcels is contingent upon carriers accurately recording with their MDD the delivery location of each parcel delivered. However, the MDDs have only been fully deployed since October 2015, so the Postal Service fully expects to discover many data quality and consistency issues as it explores this approach.

The method proposed to obtain accurate counts of collection mail requires substantial labor costs. Moreover, the Postal Service believes the labor costs necessary to conduct daily counts far outweigh the potential benefits. In the CCCMVSS, the carriers measured their collection mail daily and recorded the results. Letters and flats were recorded with linear measurements, and piece counts were used for parcels. The entire process took carriers approximately three minutes per route daily to accurately count and record collection mail. It then took the supervisor approximately ten minutes per ZIP Code to enter the data in a web-based system. Extrapolating these costs across the city letter route network equates to \$289,000 per day in carrier costs and \$83,000 in supervisor costs per day.¹⁸ The total of over \$370,000 per day results in over \$100 million per year to accurately record daily counts of collection mail from customer receptacles. This total ignores the one-time training of carriers of approximately twenty minutes per route which adds \$1.9 million in costs.

¹⁸ Daily estimates based on FY 2015 carrier wage of \$41.32 (Source: USPS-FY15-8) and 140,000 routes and a supervisor wage of \$50.12 and 10,000 ZIP Codes with city routes.

Unequivocally, the labor costs of accurately capturing collection mail counts on a daily basis are prohibitive.

The sizeable labor costs to “automate” the measurement of collection mail on city routes has motivated the Postal Service to investigate alternatives that possibly could be used in its regular delivery equation. One initial thought was to leverage the information from the latest Rural Mail Count (RMC). The RMC is conducted regularly over a two-to-four week period in which the mail volumes on most active rural routes are counted.¹⁹ For each route participating in the RMC, collection mail is counted daily by compensation category. Thus, the Postal Service initially thought the daily collection counts from the RMC possibly could be used as a proxy for collection mail on city routes. However, there are some serious potential difficulties with this approach. For example, there are ZIP Codes that contain only city carrier routes. For these ZIP Codes, it is not clear how a “substitute” ZIP Code with rural routes should be selected as a proxy. In addition, there is a potentially serious issue with timing. The RMC is taken at a specific period of time during the year and that time period may not match the data collected from other sources. For these reasons, it is thus unlikely that a meaningful and reliable relationship between collection volumes found on city routes and collection volumes found on rural routes can be used.

The Postal Service, however, is exploring other data sources for collection mail as a viable alternative to the extremely costly path of requiring city carriers to measure and record collection mail daily.

¹⁹ Typically, the Rural Mail Count is conducted annually, but that is not required. In some years, there have been two or none conducted. Per the labor agreement, some routes are excluded from the count. However, a substantial number of routes are counted. The latest relevant summarized counts for costing purposes are filed with the Annual Compliance Report as part of folder 40 (USPS-FY15-40).

F. Summary and Preliminary Time Line

The Commission directed the Postal Service to investigate the steps necessary to obtain accurate daily volume measures of collection mail, in-receptacle parcels, deviation parcels, and accountable mail. It expressed two reasons for this direction: 1) to determine if a single-equation model of city carrier street time could be successfully estimated and if such a model could produce improved estimates of street time variability, and 2) to reduce or eliminate the need for expensive and time-consuming special data collection studies.²⁰ As previously discussed, the Postal Service has seriously begun investigating different methods for gathering each of the data elements requested by the Commission. The Postal Service's investigation into the Commission's directive has two distinct phases. The first phase is exploring if the data can be practically gathered and if they are sufficiently reliable and accurate to be used for regulatory costing purposes. The second phase is to determine whether the obtained data could be used to construct a single-equation model of street time. Phase two, of course, does not occur if, for any reason, the conclusion from phase one is that the data are not acceptable for regulatory purposes.

Largely due to the fact that much of the required data only recently started to be recorded, the Postal Service has just begun the first phase. The Postal Service expects it will take at least six months to thoroughly investigate the practicality, reliability, and accuracy of obtaining daily volume measures of in-receptacle parcels, deviation parcels, and accountable mail using PTR, in conjunction with information from the MDDs. Because no measure of collection mail from customers on city letter routes currently exists, and any attempts to regularly record daily counts would appear to require

²⁰ See Docket No. RM2015-7, Order No. 2792, at 65 (October 29, 2015).

tremendous expense, the Postal Service is investigating the possibility of finding a proxy for collection mail, while recognizing that any proxy is not likely to be ideal. The Postal Service also expects this investigation to take several months to complete.

Assuming the efforts from the first phase lead to the second phase, the Postal Service expects the investigation of the feasibility of a single equation model to take several additional months. This time estimate is consistent with the period it took to construct, validate, and document the three econometric equations ultimately used in Proposal Thirteen.

In sum, the Postal Service is planning to aggressively investigate the possibility of using operational data to obtain accurate daily estimates for three of the data elements (in-receptacle parcels, deviation parcels, and accountable mail) and to use a proxy for the fourth data element (collection mail) identified by the Commission. The Postal Service notes that accurate estimation of a single-equation street time model requires successful resolution of all of these issues. *Obtaining accurate measures of only a subset of the four variables is not sufficient to move to the second phase.*

This investigation is being done to address two issues: 1) feasibility of estimating a single-equation model with reliable variabilities and 2) reduce or eliminate the need for expensive and time-consuming special data collection studies. This thorough investigation will require meticulous attention to detail, as well as validation with other Postal Service ongoing data systems such as CCCS. These two steps are critical to ensure that the data gathered are sufficient to use for regulatory costing purposes. For these reasons, the Postal Service estimates this investigation to take at least one year to complete.

III. Estimating Parcel and Collection Route Models

A. Background

Not all city carrier street costs are incurred on letter routes. Letter routes are strictly defined with a fixed set of delivery points and are typically serviced in the same manner six days a week.²¹ Letter routes encompass approximately ninety-six percent of city carrier street time labor costs.²² The remaining four percent of city carrier street costs have been labeled as Special Purpose Route (SPR) costs.²³ Currently, the treatment of SPR costs is based on several special studies conducted in 1995 and litigated in Docket No. R97-1.²⁴ The vintage of these special studies, along with the rapid growth in parcel volume, has raised the priority to update these cost models. In the FY 2015 ACR, the Postal Service indicated it had initiated an investigation into updating the SPR cost model.²⁵

B. Initial Investigation

For the purposes of this section, the discussion is limited to non-Sunday city carrier SPR costs. The treatment of Sunday delivery costs will be addressed in Section IV of this report. City carriers on SPR perform two primary activities: 1) deliver parcels and accountable mail and 2) collect mail from street letter boxes and other mail collection points. As a result, SPR costs are naturally divided into two categories identified by separate Labor Distribution Codes, LDC 23 and LDC 27.

²¹ A small number of letter routes only operate five days a week due to the large amount of deliveries to businesses which are closed on Saturday.

²² USPS-FY15-32, Workbook CS06&7, Tab IOCS.

²³ In delivery operations, the term Special Purpose Route is not meaningful. Rather, these costs are classified as LDC 23 (Parcel or Combination Route) or LDC 27 (Collection route) costs.

²⁴ See Docket No. R97-1, Direct Testimony of Michael A. Nelson, USPS-T-19.

²⁵ USPS-FY15-9 (Roadmap), Section Three at 122.

LDC 23 includes hours incurred on parcel and combination routes. Parcel routes are designed primarily for the delivery of parcels and accountable mail and are often used to support pure foot letter routes. Consequently, substantial parcel route costs are found in major metropolitan cities such as Boston or New York. Carriers on combination routes perform a variety of activities, including delivering parcels and accountable mail, servicing relay boxes, making runs to and from the airport, and collecting mail from street letter boxes. Hours in LDC 27 are almost exclusively reserved for carrier time spent on collection routes, which includes collecting mail from street letter boxes and from customers with large amounts of collection mail.

The Time Attendance Collection System (TACS) can be used to form separate cost pools for LDC 23 and LDC 27, but these operational data do not provide any further detail on the times required to perform the different specific activities performed by city SPR carriers. Thus, use of operational data is limited to estimating single-equation, “top-down” equations for each of the two LDCs.²⁶

SPR carriers do not have a fixed route and their activities often vary, to a certain degree, on a daily basis. For example, carriers clocked to LDC 23 may deliver parcels all day on one day, but spend three or four hours performing relay activities or collecting mail from large firms on another day. In an effort to better understand the activities currently performed by SPR carriers, the Postal Service initiated two “proof of concept” efforts to investigate the feasibility of field investigations for SPR carriers. These are discussed in next two subsections.

²⁶ The operational datasets, DOIS and Form 3999, used to update the city carrier letter route street cost model generally do not provide any information as to the activities or volumes delivered or collected on SPR.

C. Proof of Concept Investigations

In the proof of concept investigations, SPR carriers in a very small number of ZIP Codes were asked to measure the time they spent in various street activities. The times were recorded by having the carriers scan barcodes as they performed their various street duties during the day. For example, there were barcodes for activities such as “Drive”, “Deliver Parcels” and “Unload Vehicle at Base Facility”. In addition, the corresponding delivered volumes were extracted from PTR.

A preliminary review of the data collected revealed that the diversity in activities of SPR carriers presents a formidable challenge to updating these cost models with data gathered from a special field study: its cost. The heterogeneity of activities across offices suggests that estimating robust econometric models will require a sizeable dataset only achieved through a very large sample of offices. The carrier labor and administrative costs of gathering data from a large sample are substantial.

Using an example of a carrier delivering 80 packages to separate addresses on a given day, recording the required data would necessitate approximately 160 scans.²⁷ Suppose it takes the carrier on average six seconds to complete each activity scan. This results in 960 seconds or sixteen minutes of study scanning labor cost daily. Multiplying the time by the average carrier wage rate results in roughly \$11 in labor costs per day per carrier surveyed.²⁸ This field study will likely involve several thousand carriers for a minimum of two weeks, so it will lead to at least several hundred thousand

²⁷ Under this scenario the number of scans would be slightly higher as there are also some administrative scans but 160 scans are used for simplicity.

²⁸ USPS-FY15-8, City Carrier wage of \$41.32.

dollars in carrier labor costs just from scanning study barcodes.²⁹ Moreover, there will also be significant training costs for the carriers and administrative personnel needed to monitor the study. In sum, the costs of conducting a field study are very high, especially considering the risk of collecting data of insufficient quality for regulatory purposes. The Postal Service has not abandoned the idea of conducting a special field study, but more investigation is needed to ensure that this costly endeavor will yield data of the quality and magnitude required by the Commission.

D. Investigating Use of Operational Data

The Postal Service is also investigating the feasibility of using operational data to estimate variability equations for LDCs 23 and 27. This approach borrows the suggestion from the Commission for city carrier letter routes, in which the total street time is regressed against the relevant volumes. This approach, as with the one suggested for letter routes, would not separately investigate the individual activities performed by SPR carriers. The primary advantages of this method, as compared to gathering data from a field study, are 1) its lower cost, 2) the size of the analysis dataset, and 3) the ability to update much more frequently.

As a first step in the investigation into this approach, an attempt will be made to match relevant work hours from TACS with corresponding volumes extracted from PTR. While this approach seems straightforward in concept, the hurdles to implementation are substantial. As an example, TACS and PTR are separate data systems that record data in different ways with dissimilar identifiers. Initial investigation has shown that matching daily data from the two sources for individual SPR carriers is a formidable

²⁹ The CCCMVSS AND CCPAS both included approximately 6,000 carriers for two weeks.

challenge. This investigation has just begun, and the Postal Service expects the effort to take several months to complete.

IV. Updating the Sunday Delivery Model

The Commission directed the Postal Service to address the feasibility of updating the cost model used to assign the costs associated with Sunday delivery hours.³⁰ The established cost model that assigns to products costs incurred from Sunday delivery hours uses current actual operational time and volume information rather than data from special field studies or econometric equations. Thus, there is not an issue with continuously updating the data used in the established model, as it is done automatically each year. The treatment of Sunday delivery hours is filed as part of the ACR in folder USPS-FY15-NP27.

The above constitutes the Postal Service's response to its reporting obligations that arose from Order No. 2792.

Respectfully submitted,

UNITED STATES POSTAL SERVICE

By its attorney:

Eric P. Koetting

475 L'Enfant Plaza West, S.W.
Washington, D.C. 20260-1137
(202) 277-6333
February 16, 2016

³⁰ See Docket No. RM2015-7, Order No. 2792, at 66 (October 29, 2015).